

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A card reader for reading data contained in a card comprising:

an electrical connector for electrically connecting to an electrical mating connector of said card to read data contained therein,

wherein said electrical connector comprises:

a rigid substrate, and

a contact which is in adjacent direct contact with said rigid substrate so as to be directly supported by said rigid substrate,

wherein said contact makes electrical connection with a corresponding contact on the electrical mating connector of said card,

wherein said contact is a collapsible, resiliently deformable hollow projection, and

wherein an area between said contact and said rigid substrate is empty to permit said contact to move between a fully collapsed deformed state and a fully extended undeformed state,

wherein an opposing force opposing a force deforming and collapsing said contact is provided by said rigid substrate directly to said contact and

wherein an inside surface of said contact when in the fully collapsed deformed state is in substantially direct contact with the surface of said rigid substrate.

2. (Previously presented) A card reader as claimed in claim 1, wherein an exterior surface of the contact is generally convex.

3. (Previously presented) A card reader as claimed in claim 1, wherein said contact is generally dome-shaped.

4. (Previously presented) A card reader as claimed in claim 1, wherein said contact comprises a metal.

5. (Previously presented) A card reader as claimed in claim 1, wherein said contact comprises an insulating material treated so as to be conductive.

6. (Previously presented) A card reader as claimed in claim 1, wherein said rigid substrate comprises a Printed Circuit Board (PCB).

7. (Previously presented) A card reader as claimed in claim 6, wherein said PCB is flexible.

8. (Previously presented) A card reader as claimed in claim 1, wherein said rigid substrate supports a conductive track electrically coupled to the contact.

9. (Previously presented) A card reader as claimed in claim 1, further comprising:
means for retaining the mating connector of the card in releasable contact with said contact of said electrical connector.

10. (Previously presented) A card reader as claimed in claim 1, wherein said contact is secured in position on said rigid substrate using solder.

11. (Previously presented) A card reader as claimed in claim 1, wherein said electrical connector comprises a plurality of contacts.

12. (Previously presented) A card reader as claimed in claim 1, wherein said rigid substrate supports a contact on each of two opposing surfaces of said rigid substrate.

13. (Previously presented) A card reader as claimed in claim 12, wherein said electrical connector is arranged to make contact with two mating connectors arranged on the sides of two cards.

14. (Previously presented) A card reader as claimed in claim 1, wherein said card reader is for use as a smart card reader for reading a smart card.

15. (Previously presented) A card reader as claimed in claim 14, wherein the smart card is a SIM card for use with a portable telephone.

16. (Previously presented) A portable telephone comprising a card reader according to claim 1.

17. (Previously presented) A card reader for reading data contained in a card comprising:

an electrical connector for electrically connecting to an electrical mating connector of said card to read data contained therein,

wherein said electrical connector comprises a rigid substrate,

a contact which is in adjacent direct contact with said rigid substrate so as to be directly supported by said rigid substrate, and

means for retaining said card including said electrical mating connector in releasable direct contact with said contact,

wherein said contact is a collapsible, resiliently deformable hollow projection,

wherein when said card is retained in said electrical connector apparatus, a volume of said card and said electrical connector apparatus is less than a total of the volumes of said card and said electrical connector apparatus taken separately,

wherein an area between said contact and said rigid substrate is empty to permit said contact to move between a fully collapsed deformed state and a fully extended undeformed state,

wherein an opposing force opposing a force deforming and collapsing said contact is provided by said rigid substrate directly to said contact, and

wherein an inside surface of said contact when in the fully collapsed deformed state is in substantially direct contact with the surface of said rigid substrate.

18. (Previously presented) A card reader as claimed in claim 17, wherein an exterior surface of said contact is generally convex.

19. (Previously presented) A card reader as claimed in claim 17, wherein said contact of is generally dome-shaped.

20. (Previously presented) A card reader as claimed in claim 17, wherein said contact comprises a metal.

21. (Previously presented) A card reader as claimed in claim 17, wherein said contact comprises an insulating material treated so as to be conductive.

22. (Previously presented) A card reader as claimed in claim 17, wherein said rigid substrate comprises a Printed Circuit Board (PCB).

23. (Previously presented) A card reader as claimed in claim 22, wherein said PCB is flexible.

24. (Previously presented) A card reader as claimed in claim 17, wherein said rigid substrate supports a conductive track electrically coupled to said contact.

25. (Previously presented) A card reader as claimed in claim 17, wherein said means for retaining is a sliding catch operable to hold said card in a fixed location.

26. (Previously presented) A card reader as claimed in claim 17, wherein said contact is secured in position on said rigid substrate using solder.

27. (Previously presented) A card reader as claimed in claim 17, wherein said electrical connector comprises a plurality of contacts.

28. (Previously presented) A card reader as claimed in claim 17, wherein said rigid substrate supports a contact on each of two opposing surfaces of said rigid substrate.

29. (Previously presented) A card reader as claimed in claim 28, wherein said electrical mating connector is arranged to make contact with two mating connectors arranged on the sides of two cards.

30. (Previously presented) A card reader as claimed in claim 17, wherein said card reader is a smart card reader for reading a smart card.

31. (Previously presented) A card reader as claimed in claim 30, wherein the smart card is a SIM card for use with a portable telephone.

32. (Cancelled)

33. (Previously presented) A portable telephone comprising a card reader as claimed in claim 17.